

## Key Steps in the Dredging Process

As called for in the ROD, dredging will be conducted in two phases. Phase 1 will be the first year of dredging. It will be done at less than full-scale and will involve extensive monitoring. Phase 2, which will be conducted over the next five years, will target the remaining sediments for removal. Monitoring data collected during both phases will be assessed against engineering performance standards that ensure the dredging is done safely and on schedule.

The performance standards cover three aspects of the project: dredging-related resuspension of sediments from the river bottom, residual levels of PCBs after dredging occurs, and the productivity of the dredging work. They were developed in consultation with the Natural Resource Trustees—New York State, the National Oceanic and Atmospheric Administration and the United States Fish and Wildlife Service using objective environmental, scientific and technical criteria.

The experience and information gained during phase 1 of the dredging will be used to evaluate and make any necessary adjustments to the operations or performance standards prior to the second phase of dredging. The standards will be the subject of peer reviews by independent external panels of scientists before phase 1 of the dredging and again prior to the start of phase 2.

### The two phases of the dredging project will be designed in three stages:

#### Preliminary

The preliminary stage is a conceptual period during which broad plans for dredging, technical specifications and a construction schedule will be developed. Work that will be conducted during both phase 1 and phase 2 of the dredging project will be covered during the preliminary stage of design.

#### Intermediate

In the intermediate stage, the types of dredging equipment to be used, final disposal and rail options, and technologies for handling and dewatering of sediments will be chosen. To allow phase 1 of the project to begin as scheduled, the intermediate stage of design will proceed separately for phase 1 and phase 2 of the project.

#### Final

The third stage is final design, which will take into account the final assessments of habitats and cultural and archaeological resources and additional engineering data. The final design will include detailed plans and specifications that will enable the dredging work to begin. As with the intermediate design stage, the final design for phase 1 and phase 2 will proceed separately to allow phase 1 of the project to begin as scheduled.

## EPA's Role

EPA will retain direct responsibility for three aspects of the design project: the siting of sediment processing/transfer facilities, the development and peer review of engineering performance standards and the creation and implementation of a Community Involvement Plan for the project.

In addition, EPA will oversee the specific activities GE undertakes during the design process and be responsible for reviewing and approving all design work plans and reports. EPA will meet regularly with GE to discuss the status of ongoing efforts, upcoming activities and reports, and to resolve any issues that may arise.

## GE's Role

Under the draft order, GE has agreed to perform the following activities needed to complete the design of the dredging project:

- Design a dredging project that will be completed in six years, will be conducted in two phases, and will be consistent with the engineering performance standards developed for the project.
- Evaluate sampling data from the collection and analysis of approximately 30,000 sediment samples from the Upper Hudson. This sediment sampling work is being performed under a separate Administrative Order on Consent signed in July 2002.
- Determining locations for the disposal of the dredged and dewatered sediments.
- Develop engineering and design specifications to support EPA's selection of sites for sediment processing/transfer facilities.
- Design the sediment processing/transfer facilities.
- Develop engineering and design information to use in selecting which areas of sediment will be removed during phase 1 and phase 2 of the dredging.
- Develop all remedial design documents.
- Design an effective monitoring program that will meet the requirements of the engineering performance standards.

## Work Plan Design

The plan for designing the dredging project is detailed in the **Remedial Design Work Plan**, which describes design support activities, the engineering design process, key remedial design reports and deliverables, and schedule milestones. Work plans describing the baseline monitoring program, habitat delineation and assessment, and a cultural and archeological resources assessment are included as appendices.

## Baseline Monitoring



Monitoring will be done before dredging begins to establish pre-dredging (baseline) conditions that will be used to evaluate whether the project is meeting the engineering performance standard for the resuspension of dredged sediments. It will also provide data on PCB levels in fish and water to allow the evaluation of long-term recovery trends. The sampling required to delineate PCB contamination in the Upper Hudson River sediment is being conducted under the July 2002 Sediment Sampling Administrative Order on Consent.

## Habitat Delineation and Assessment



The range of habitat conditions in and along the shoreline of the river where dredging and related activities are planned will be documented before work begins. This information will be used to design and evaluate the success of a habitat replacement program that will be implemented after dredging takes place. As part of this program, specific biological assessments will be conducted for the bald eagle, which is on federal and New York State lists of threatened species, and the shortnose sturgeon, which is on the federal list of endangered species. These assessments will evaluate the potential impacts of dredging on the species, their habitats, and their mating behaviors.

## Cultural and Archaeological Resources Assessment



The Upper Hudson area has a long history of settlement and development, with prehistoric archaeology and settlement patterns dating back more than 10,000 years. The potential effects of dredging on cultural and archaeological resources in the Upper Hudson River and along shoreline areas will be evaluated prior to the dredging. Information about the historic properties in and near areas to be dredged will be identified and potential impacts will be assessed.

## Public Review

The draft design work plans have been released for public review and input. EPA will consider public input on the work plans and will decide whether any changes to these technical documents are appropriate before they are finalized. Because the work plans are incorporated in the AOC, the Agency must reach agreement with GE on any additional changes before it is signed. The three-week public review period begins on May 28 and ends on June 18.

The draft AOC is also available for public review. It is being released to the public for informational purposes only.

The draft Remedial Design Work Plan, the Baseline Monitoring Program Scoping Document, Habitat Delineation and Assessment Work Plan, and the Cultural and Archeological Resources Assessment Work Plan and fact sheets on the work plans are available at information repositories located in Glens Falls, Ft. Edward (Hudson River Field Office), Saratoga Springs, Albany, Poughkeepsie, and New York City. Electronic versions can be found on the EPA project Web site at [www.epa.gov/hudson](http://www.epa.gov/hudson).

Copies are also available in print and on CD-ROM, by calling the Hudson River Field Office.

Written comments on the draft design work plans should be sent to the Hudson River Field Office at the address below.

## Public Education Sessions

EPA is hosting public information sessions on the draft engineering performance standards for the cleanup project and will allow time at those sessions for questions on and discussion of the draft work plans. The sessions will be held on:

### Monday, June 2

**Queensbury Hotel**  
**88 Ridge Street**  
**Glens Falls, New York**  
**2:00 pm - 4:00 pm/6:00 pm - 9:00 pm**

### Tuesday, June 3

**Sage College of Albany, Kahl Center**  
**140 New Scotland Avenue**  
**Albany, New York**  
**2:00 pm - 4:00 pm/6:00 pm - 9:00 pm**

## For More Information

Visit, call, or write to the Hudson River Field Office at the address below or log on to [www.epa.gov/hudson](http://www.epa.gov/hudson).

### EPA Contacts

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*The Field Office hours are Monday – Friday  
8:00 am – 4:30 pm, with evening hours by  
appointment.*

**David Kluesner,**  
**Community Involvement Coordinator**  
  
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### EPA Superfund Ombudsman

EPA Region 2 has designated an ombudsman as a point-of-contact for community concerns and questions about the federal Superfund program in New York, New Jersey, Puerto Rico, and the U.S. Virgin Islands. To support this effort, the Agency has established a 24-hour, toll-free number that the public can call to request information, express concerns, or register complaints about Superfund. The ombudsman for EPA's Region 2 office is: George H. Zachos, U.S. EPA, Region 2, 2890 Woodbridge Avenue MS-211, Edison, New Jersey 08837, (732) 321-6621, Toll-free (888) 283-7626



## Project Design Work Plans General Overview

May 2003

### Highlights

The U.S. Environmental Protection Agency (EPA) has reached a draft legal agreement with the General Electric Company (GE) for the company to perform the design work needed to implement the cleanup of a 40-mile stretch of the Upper Hudson River. The agreement, which is embodied in a draft Administrative Order on Consent (AOC), incorporates draft versions of design work plans that address the design of the dredging work: habitat delineation and assessment, cultural and archaeological resources, and baseline monitoring for the cleanup project. EPA is releasing the draft work plans for public review and input before they are finalized.

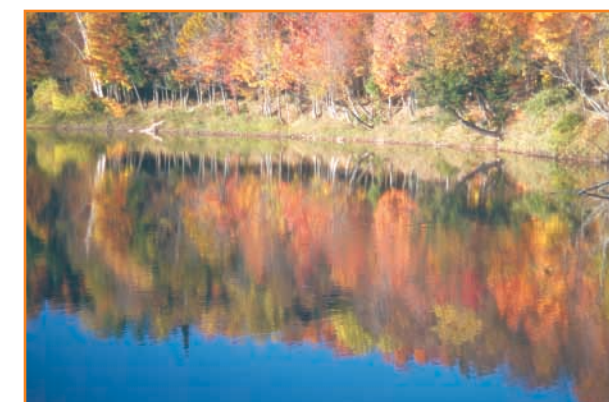
### Designing the Hudson River Cleanup

On February 1, 2002, EPA issued a Record of Decision (ROD) for the Hudson River PCBs Superfund site. The ROD called for targeted environmental dredging of an estimated 2.65 million cubic yards of PCB-contaminated sediments from the Upper Hudson River between Hudson Falls, New York and the Federal Dam at Troy. Before dredging can begin, comprehensive engineering plans and specifications for the project must be developed to ensure that it is implemented in a safe and effective manner.

The design work is expected to take three years to complete and will be performed and paid for by GE with oversight by EPA and New York State. EPA anticipates that the design work will be phased so that dredging can begin in spring 2006. EPA and GE are committed to public participation throughout the project through an open process that keeps the public informed and encourages public input.

### What Is Remedial Design?

The term "remedial design" refers to the engineering work required to develop the details of the dredging program. During the design process, approaches to removing sediments from the river bottom, transporting and disposing of dredged sediments, and replacing habitat in dredged areas will be fully developed.



The design process will provide detailed answers to important questions such as:

- Which sediments be dredged?
- What kinds of dredging equipment will be used?
- How and from what locations will dredged sediments be transported to shore?
- How will water be removed from dredged sediments?
- How will water be treated prior to its return to the river?
- Which rail system will be used to transport dewatered sediments?
- Where will dewatered sediments be disposed of?
- What dredged areas will be restored?
- What habitat replacement and backfill materials will be used?